

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Seattle 5755 8th Street East Tacoma, WA 98424 Tel: (253)922-2310

TestAmerica Job ID: 580-44348-1 Client Project/Site: Clean Harbors

For:

ISI Environmental Services 215 S Laura Wichita, Kansas 67211

Attn: Brady Gerber

Authorized for release by: 7/15/2014 1:20:08 PM

Melissa Armstrong, Project Manager II (253)248-4975

melissa.armstrong@testamericainc.com

----- Links -----

Review your project results through

Total Access

Have a Question?



Visit us at: www.testamericainc.com

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

Client: ISI Environmental Services Project/Site: Clean Harbors TestAmerica Job ID: 580-44348-1

Table of Contents

Cover Page	1
Table of Contents	2
Case Narrative	3
Definitions	
Client Sample Results	5
QC Sample Results	6
Chronicle	7
Certification Summary	8
Sample Summary	9
Chain of Custody	10
Receipt Checklists	11

q

4

5

6

8

9

Case Narrative

Client: ISI Environmental Services

TestAmerica Job ID: 580-44348-1

Project/Site: Clean Harbors

Job ID: 580-44348-1

Laboratory: TestAmerica Seattle

Narrative

Receipt

The sample was received on 7/3/2014 9:30 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.8° C.

GC/MS Semi VOA

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

General Chemistry

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Organic Prep

No analytical or quality issues were noted, other than those described in the Definitions/Glossary page.

Definitions/Glossary

Client: ISI Environmental Services

TestAmerica Job ID: 580-44348-1

Project/Site: Clean Harbors

Glossary

TEF

TEQ

Toxicity Equivalent Factor (Dioxin)

Toxicity Equivalent Quotient (Dioxin)

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points

Client Sample Results

Client: ISI Environmental Services

Project/Site: Clean Harbors

Client Sample ID: J3-S6

Date Collected: 07/02/14 16:40

Date Received: 07/03/14 09:30

Percent Moisture

TestAmerica Job ID: 580-44348-1

Lab Sample ID: 580-44348-1

Matrix: Solid

07/07/14 16:04

Percent Solids: 80.0

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dalapon	ND		30		ug/Kg	₩	07/07/14 15:49	07/12/14 16:45	•
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
2,4-Dichlorophenylacetic acid	66		51 - 129				07/07/14 15:49	07/12/14 16:45	
- General Chemistry									
Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Solids	80		0.10		%			07/07/14 16:04	1

0.10

%

TestAmerica Job ID: 580-44348-1

Client: ISI Environmental Services

Project/Site: Clean Harbors

Method: 8151A - Herbicides (GC/MS)

Lab Sample ID: MB 580-163211/1-A

Lab Sample ID: LCS 580-163211/2-A

Matrix: Solid

Matrix: Solid

Analysis Batch: 163764

Analysis Batch: 163764

Client Sample ID: Method Blank Prep Type: Total/NA

Prep Batch: 163211

мв мв

Result Qualifier RL MDL Unit Analyte D Prepared Analyzed Dil Fac 25 07/07/14 15:49 07/12/14 15:36 Dalapon ND ug/Kg

MB MB

Surrogate Qualifier Limits Prepared Analyzed Dil Fac %Recovery 2,4-Dichlorophenylacetic acid 51 - 129 07/07/14 15:49 07/12/14 15:36 105

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Type: Total/NA

Prep Batch: 163211

LCS LCS Spike

Added Result Qualifier Analyte Unit Limits %Rec 38 Dalapon 667 252 ug/Kg 23 - 117

LCS LCS

Surrogate %Recovery Qualifier Limits 2,4-Dichlorophenylacetic acid 51 - 129 106

Lab Sample ID: LCSD 580-163211/3-A Client Sample ID: Lab Control Sample Dup

Matrix: Solid

Analysis Batch: 163764

Prep Batch: 163211 LCSD LCSD Spike %Rec. RPD Analyte Added Result Qualifier Limits RPD Limit Unit %Rec 667 Dalapon 274 ug/Kg 41 23 _ 117 8

LCSD LCSD

Surrogate %Recovery Qualifier Limits 2,4-Dichlorophenylacetic acid 120 51 - 129

TestAmerica Seattle

Lab Chronicle

Client: ISI Environmental Services

Project/Site: Clean Harbors

TestAmerica Job ID: 580-44348-1

Client Sample ID: J3-S6	Lab Sample ID: 580-44348-1
Date Collected: 07/02/14 16:40	Matrix: Solid
Date Received: 07/03/14 09:30	Percent Solids: 80.0

	Batch	Batch		Dilution	Batch	Prepared		
Prep Type	Type	Method	Run	Factor	Number	or Analyzed	Analyst	Lab
Total/NA	Prep	8151A			163211	07/07/14 15:49	RBD	TAL SEA
Total/NA	Analysis	8151A		1	163764	07/12/14 16:45	ERB	TAL SEA
Total/NA	Analysis	D 2216		1	163214	07/07/14 16:04	DA	TAL SEA

Laboratory References:

TAL SEA = TestAmerica Seattle, 5755 8th Street East, Tacoma, WA 98424, TEL (253)922-2310

Certification Summary

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44348-1

Laboratory: TestAmerica Seattle

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska (UST)	State Program	10	UST-112	05-27-15
California	NELAP	9	01115CA	01-31-14 *
California	State Program	9	2901	01-31-15
L-A-B	DoD ELAP		L2236	01-19-16
L-A-B	ISO/IEC 17025		L2236	01-19-16
Montana (UST)	State Program	8	N/A	04-30-20
Oregon	NELAP	10	WA100007	11-06-14
USDA	Federal		P330-11-00222	04-08-17
Washington	State Program	10	C553	02-17-15

 $[\]ensuremath{^{\star}}$ Certification renewal pending - certification considered valid.

Sample Summary

Client: ISI Environmental Services Project/Site: Clean Harbors

TestAmerica Job ID: 580-44348-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
580-44348-1	J3-S6	Solid	07/02/14 16:40	07/03/14 09:30

- 0

4

0

9

5755 8th Street East

Seattle/Tacoma

Tacoma, WA 98424 phone 253.922.2310 fax 253.922.5047

Client Contact

Tel/Fax: 316-264-7650

Calendar (C) or Work Days (W)

¥

Analysis Turnaround Time

TAT if different from Below

Project Manager:

Brady (Ter Ser

Site Contact: Lab Contact:

P O #

Sample Identification

Sample Date

Sample Time

Sample Type

of Cont.

 \square

2 days 1 day

1 week 2 weeks

Filte ed Sample 2

7/2/2014 (640 Grab

Soil Matrix

J3-S6

Site: Wichita, KS

(xxx) xxx-xxxx

Project Name: Clean Harbors

FAX

(316) 264-7050 Wichita KS 67211 215 South Laura iSi Environmental

5 6 7 8 9 10

Chain of Custody Record

イイレイダ

	መ
Į	25
	>
	Ħ
	ത
ļ	Ž .
	\mathcal{O}
ı	$\mathbf{\Omega}$

THE LEADER IN ENVIRONMENTAL TESTING				
		JHE LE		7
		ADER	I	(
		Z		_
		VIRO		-
		NME		Ĉ
7014		NTAL.	l	*
2014		TESTI		(
	20	គឺ 14		\$

										 		The state of the s	THE RESIDENCE OF THE PARTY OF THE PARTY.	22	E: I	
Received by:	Received by:	l In	Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)							 	X	Dalapon		ab Contact:	ite Contact:	
ived	ived		p				-							ntact	ıtact:	
by:	ह व्य ्ट	Return To Client	Disa			-				 						
	Ž	То С	§ -							 			· · · · · · · · · · · · · · · · · · ·	┨		
) Jien												1		
			fee													
		` ,	nav													
			be 2											Ļ	Ļ	ļ
	L'	□ Disposal By Lab												Carrier:	Date:	
	0 10	l Sal B			-' 8	25 E		≣ -						15		7
Company:	Company: Company:	y La		\$\\\2\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	- }			•		 	<u> </u>			1		(
my:	ompany:			er	- 3					 	_			1		7
	<u>a</u>	_	Packs	₽ B	I (1		IC
	4	 	ē	ooler/TB Die												
		Archive For	Packing		_ ;									1	'	
		, ê _T	Packin	18 S	_ 3	2				 			<i>ω</i>	-	0	-1
Date/Time:	Date/Time: 1/3 Date/Time:		Po Po	ooler/TB Dig/TB/cor 48 unc 48 ooler Dsc Med Med July 18									SDG No.	<u>-</u>	COC No:	TestAmerica Laboratories, Inc.
ïme:	lime: /3//4 l'ime:		Subby than 1 mont	多七								S.	ē º	1	No:	mer
	1/4		5	48 unc								mple		of,		ica]
	`	Mc		p nc								Sample Specific Notes		_		Labo
		Months		3.7								cific				rate
	<u>0</u> 430	"	<u> </u>									Note		COCs		ries
	2			i	1							v:				Inc
	0			:		L									L.,	L .
		4				Pag	 e 1() of	44						7/1	5/2

Special Instructions/QC Requirements & Comments:

Relinquished by:

Company:

Date/Time:

Form No. CA-C-WI-002, dated 04/07/2011

Relinquished by:

Relinquished by:

Company: Company:

trice

Date/Time: 7-2-14/1805

Date/Time:

Preservation Used: 1=Ice, 2=HCl; 3=H2SO4; 4=HNO3; 5=NaOH; 6=Other

Possible Hazard Identification

Non-Hazard

Flammable

Skin Irritant

Poison B

Unknown

Login Sample Receipt Checklist

Client: ISI Environmental Services Job Number: 580-44348-1

Login Number: 44348 List Source: TestAmerica Seattle

List Number: 1

Creator: Blankinship, Tom X

Creator: Blankinship, Tom X		
Question	Answer	Comment
Radioactivity wasn't checked or is = background as measured by a survey meter.</td <td>True</td> <td></td>	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	Not requested on COC.
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Λ

<u>၂</u>

7

9

10